

The invention claimed is:

1. A wear insert for a ram packer for axially slidable engagement in a ram packer of a blowout preventer comprising:

(a) a sealing surface having a semicircular face and

(b) a ram packer mounting surface having a multi-sided configuration having a first pair of parallel sides, second pair of parallel sides, a pair of non parallel sides extending from said second pair of parallel sides, a first area defined by a plane through said non parallel sides and said first pair of parallel sides and at least one projection for spacing said wear insert away from a seating surface of a ram packer and having a second area, said second area being less than said first area, said projection extending from said first area, said projection not for preventing rotation of said wear insert.

2. The insert according to claim 1 wherein said projection comprises beveled surfaces extending from said first area to said second area.

3. The insert according to claim 1 comprising two projections formed by a slot through said mounting surface.

4. The insert according to claim 1 wherein said projection comprises a cove extending between said first and second areas.

5. The insert according to claim 1 wherein said projection comprises beveled surfaces extending from said first area to said second area along said first pair of parallel sides.

6. The insert according to claim 1 wherein said projection comprises beveled surfaces extending from said first area to said second area said non parallel sides and said first pair of parallel sides.

7. The insert according to claim 1 wherein said second area is less than 50% than said first area.

8. The insert according to claim 1 wherein said second area is less than 75% than said first area.

9. The insert according to claim 1 wherein said bevels have an angle in the range of 10 to 40°.

10. The combination comprising

a ram packer of an elastomeric material having a recessed slot or cutout configured to conform to and receive

a wear insert for a ram packer of a blowout preventer comprising:

(a) a sealing surface having a semicircular face and

(b) a ram packer mounting surface having a multi-sided configuration having a first pair of parallel sides, second pair of parallel sides, a pair of non parallel sides extending from said second pair of parallel sides, a first area defined by a plane through said non parallel sides and said first pair of parallel sides and at least one projection for spacing said wear insert away from a seating surface of a ram packer and having a second area, said second area being less than said first area, said projection extending from said first area, said projection not for preventing rotation of said wear insert.

11. The insert according to claim 10 wherein said projection comprises beveled surfaces extending from said first area to said second area.

12. The insert according to claim 10 comprising two projections formed by a slot through said mounting surface.

13. The insert according to claim 10 wherein said projection comprises a cove extending between said first and second areas.

14. A ram packer for use in a hydraulic blowout preventer comprising:

(a) a body of hard elastomeric material having attachment means on the rear for attachment to a hydraulic ram and a packer surface opposite said attachment means;

(b) a recess in said packer surface for receiving a replaceable wear insert, said recess defining a substantially multi-sided shape toward the rear thereof; and

(c) a replaceable wear insert for disposition within said recess including a sealing surface having a semicircular face and a ram packer mounting surface having a multi-sided configuration having a first pair of parallel sides, second pair of parallel sides, a pair of non parallel sides extending from said second pair of parallel sides, a first area defined by a plane through said non parallel sides and said first pair of parallel sides and at least one projection for spacing said wear insert away from a seating surface of a ram packer and having a second area, said second area

being less than said first area, said projection extending from said first area, said projection not for preventing rotation of said wear insert.

15. The ram packer according to claim 14 wherein said body further comprises two parallel plates retained in spaced relation with one another by two rods and said hard elastomeric material is molded about said plates and rods.

16. The ram packer according to claim 15 wherein said attachment means comprises a pair of lugs extending from the rear of said body, one each of said lugs being connected to one each of said rods.

17. The ram packer according to claim 14 wherein said heavy elastomeric material is butyl rubber.

18. The ram packer according to claim 14 wherein said wear insert comprises high molecular weight polyethylene.

19. The ram packer according to claim 14 wherein said wear insert comprises TEFLON.

20. The ram packer according to claim 14 wherein the shape of said recess and said insertion surface comprises at least two parallel surfaces normal to said packer surface.

21. The ram packer according to claim 16 wherein said heavy elastomeric material is butyl rubber.

22. The ram packer according to claim 21 wherein said projection comprises beveled surfaces extending from said first area to said second area.

23. The ram packer according to claim 22 wherein said wear insert comprises high molecular weight polyethylene.

24. The ram packer according to claim 22 wherein said wear insert comprises TEFLON.